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AUTHOR Rosenthal, Miriam K.
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ABSTRACT

Observations were conducted in Israel on 47 toddlers in sponsored family day care, 18 toddlers in community-based center day care, and 20 toddlers in kibbutz children's homes in an effort to identify differences in the three types of care. Particular attention was given to characteristics of users and caregivers, experiences generated by the educational environment, and toddlers' behavior. Findings showed no differences between family day care and centers in caregivers' characteristics (except for experience), educational program, and quality of physical environment. In centers, caregivers offered interaction of a poorer quality and the emotional tone of the program was less relaxed than in family day care. But no differences were observed in the children's behavior. Kibbutz child care rated highest on all structural indicators of quality: small groups; high adult-to-child ratio; education, training, and experience of caregivers; and physical environment. Although there were no differences in the behavior of caregivers in kibbutz and family day care, kibbutz children engaged more than family day care children in positive learning experiences and social behavior. Analyses supported the contention that the quality of the educational environment, rather than the type of child care, determines differences in learning experience. (Author/RH)

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DAILY EXPERIENCES OF TODDLERS IN THREE CHILD CARE SETTINGS IN ISRAEL: FAMILY DAY CARE, CENTER DAY CARE AND KIBBUTZ

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Miriam K. Rosenthal

School of Social Work

The Hebrew University in Jerusalem

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ABSTRACT

This paper examines the characteristics of users and care-providers, as well as experiences generated by the educational environment and the toddlers own behavior in three types of out-of-home care in Israel. Observations were conducted of 47 toddlers in sponsored Family Day Care, 18 toddlers in community based Center day care and 20 toddlers in Kibbutz Children Homes. With the exception of caregivers' experience, no differences were found between FDC and Centers in caregivers characteristics, educational program and quality of physical environment. Although caregivers in Centers offered poorer quality interaction and the emotional tone of the program was less relaxed than in FDC, no differences were observed in the children's behavior. These results differ from those reported in US comparisons of Center and FDC. The Kibbutz child care rated highest on all "structural" indicators of "quality": small groups, high adult-to-child ratio, more education, training and experience of caregivers and better physical environment. Although no differences were found in the behavior of caregivers between Kibbutz and FDC, Kibbutz children engaged more than FDC children in both positive learning experiences and social behavior. The analyses support the contention that it is the quality of the educational environment (its physical aspects, planned activities and interactions) rather than the <u>type</u> of child care that determines the observed differences in "learning experiences". However, none of the observed dimensions of the educational environment was found to be a strong enough predictor of the toddlers' social behavior to eliminate the differences found between Kibbutz and the other types of day care settings.

Daily Experiences of Toddlers in Three Child Care Settings in Israel: Family Day Care, Center Day Care and Kibbutz

Today, as more mothers with very young children join the labour force, increasing numbers of infants and toddlers in Western societies participate in some form of out-of-home care . In Israel, the proportion of working mothers with children under the age of four has risen from about 24% in 1970 to over 51% in 1985 (Central Bureau of Statistics, 1986). A similar trend has been reported in Britain (Moss, 1987), while in the USA it is estimated that 90% of all children under the age of four will require day care in the 1990s (Clarke-Stewart & Fein 1983). Family Day Care (in which care is provided in the home of a neighborhood woman) is probably the most frequently used form of day care for infants and toddlers (Kahn & Kamerman, 1987). This is due in part to parents' preference (Goelman, Rosenthal & Pence, in press) as well as to the shortage of other forms of child care, (Moss, 1987; Klein, 1985).

Nevertheless, most research on the effects of day care on infants and toddlers have focused on Center day care rather than Family Day Care (FDC). The few studies (mostly in the US and Sweden) that do compare the daily experiences of toddlers in FDC and Centers suggest that the physical environment, educational program, and the interaction with caregivers in FDC is of poorer quality (e.g. Cochran, 1977; Clarke-Stewart & Fein, 1983; Clarke-Stewart & Gruber, 1984). It is not clear whether these differences are attributed to the lower level of education and training of FDC caregivers (Clarke-Stewart, 1983), the home environment or the group

composition. Research results concerning the effects of these two child care settings on the development of children are inconsistent. Some report better developmental scores for Center children (e.g. Golden et al. 1978), while others suggest the same for FDC children (e.g. Cochran, 1977). Still other studies found no difference in outcome (Lamb et al.,1988).

This inconsistency is not surprising. Considering the fact that individual facilities vary greatly in quality, findings of various studies are not likely to be replicable and depend to a large extent on the unique characteristics of the facilities sampled (Stallings & Porter, 1980; Goelman & Pence ,1987) Further complications result from differences in the parents using FDC and Centers. For example, in Canada married and better educated mothers were more likely to enroll their preschoolers in Centers, whereas single and less educated mothers relied on FDC homes (Goelman & Pence, 1987). In contrast, in Sweden, where social policy is to place children from the most needy families in Centers, the higher SES families tend to use FDC (Lamb et al., 1988).

A recent policy development in Israel, in which equal subsidies for parents using both Centers and sponsored FDC is provided, enabled the comparison of the daily experiences of toddlers in these two types of settings to be relatively free of confounding effects resulting from different parent populations and from the great variety in the quality of care provided by individual FDC homes. A third type of child care was also examined, that of the Kibbutz "children's home", which resembles the Center in its child-designed environment and age-homogenous groupings, but is similar to FDC in its group size. Kibbutz child care is characterized by a

social ideology which places high priority on investment in early childhood education and is likely to have an effect on the daily experiences of its toddlers.

This study investigates therefore the differences between sponsored FDC homes and two other types of child care settings for toddlers in Israel: Center care and Kibbutz care. In addition, it examines the effects of variations in the educational environment on the behavior of children in these types of care settings (Cochran, 1977; Howes, 1983).

Each of the three child care settings operated under the sponsorship of an umbrella organization. All networks provided some form of support to the caregivers. However, the three settings differed on key structural dimensions which are likely to determine the daily experiences and development of the toddlers (Clarke-Stewart & Fein, 1983):

Group size - FDC and Kibbutz groups have approximately 5-6 children in care while Center groups usually have 22-27 children each.

Ratio - The ratio of caregivers to children in most FDC is 1:5, in the Kibbutz it is 1:3 and in most Centers it is 1:13.

Age composition - While both Kibbutz and Centers had age segregated groups, FDC had heterogeneous age groups. Though 89% of the children in FDC were younger than 36 months age, differences between youngest and oldest child in a group ranged on average between 7 and 24 months (Rosenthal, in press).

The daily experiences of children were conceptualized as experiences provided through the organization of space and time, through the behavior of adults and other children, and through the child's interaction with these

aspects of the environment. The study also examines possible differences in the background of children and caregivers as potential modifiers of the daily experiences in the three child care settings (e.g. Goelman & Pence, 1987).

This study compares therefore the quality of the physical environment, the content and emotional tone of the daily program, and the characteristics of the caregiver's interaction in FDC with that in Centers and Kibbutz child care:

Sponsored FDC was set up in Israel as an alternative, and preferable, form of care for infants and toddlers. It is expected therefore that the quality of the educational environment in FDC should match that of the Centers. This expectation is contradictory to the findings of several studies (Clarke-Stewart and Gruber, 1984; Cochran, 1977; Clarke-Stewart and Fein, 1983) which found that while caregivers in FDC may interact more frequently with the children than those in Centers, these interactions are not necessarily positive. The FDC caregivers were found to be more restrictive and demanding and express less frequently positive affect. These studies also observed that FDC settings in the US are reported to have fewer toys and educational materials and are considered less safe for children than Center day care. Whereas Centers have daily routines and rules based on group needs and are more likely to offer a curriculum and opportunities for learning, the daily program of children in FDC homes is less structured, with children spending more time in free activity or watching TV (Clarke-Stewart & Gruber, 1984). The Kibbutz ideology and social philosophy gives high priority to early education and allocates more

physical and manpower resources, leading potentially to a better educational environment than of either FDC and Center care.

Previous studies suggested that while FDC children may perform poorer that Center children on intellectual tasks, they obtain better scores on social interaction (Golden et al.,1978). Two major categories of experiences generated by toddlers' behaviors are therefore investigated in this study: Behaviors which generate learning experiences and those that generate social experiences. These experiences are specific to the child care environment and although they do not assess the child's adjustment outside the child care setting, they have been shown by past research to have a great effect on the child's current well being as well as future development (E.g. Carew, 1980; Clarke-Stewart, 1973; Elardo, Bradley & Caldwell, 1977; Cochran 1977; Roupp & Travers, 1982).

Because these experiences are specific to the child care setting it is expected that individual differences between toddlers in these behaviors will be better explained by aspects of the immediate, educational, environment than by the child's or the caregiver's background. Furthermore, following the results of some recent research on the effects of different types of child care (Lamb, 1988), it is expected that any differences in the behavior of children found between settings will be explained by differences in quality of the educational environment.

METHOD

Sampling procedure

Target children were sampled within the age range of 19-29 months.

FDC: All 22 homes, which had toddlers in the prescribed age range, were selected from a larger sample of FDC homes (Rosenthal, in press).

Kibbutz: All "children homes" (N-10) in Kibbutzim in the Jerusalem vicinity that had toddlers of the prescribed age, and used familial sleeping arrangements, were included in the study. The two target children were randomly selected from among those who met the age criteria.

Center: The Jerusalem representatives of the three major women organizations that operate day care centers in Israel were each requested to choose three of their "most typical" Centers in the Jerusalem area. Within these (N-9) Centers only the toddler groups participated in the study. The two target children for observation were sampled from among those that met the prescribed age criteria, matching the distribution of parents' education to that of the FDC sample.

Sample

Altogether 85 toddlers (49 boys and 36 girls) participated in the study. Their mean age was 24.26 months (S.D.-2.61). Forty-seven toddlers were in FDC, 18 in Centers and 20 in Kibbutz homes. All children were sleeping at home with their families and spending approximately eight hours a day in the group setting. All group settings followed a similar daily routine: The "educational program" took place until lunch, which was followed by a nap/rest period. Children went home shortly after getting up from the rest period.

The caregivers primarily responsible for the care of the target

children constituted the sample of caregivers in each setting: 34 were FDC providers, nine were in Centers and 10 were in Kibbut homes.

Data collection procedure

Observation of caregivers' and children's behavior, as well as of the environment and daily program, were completed in one visit in each child care setting, lasting approximately from 8.00-15.00. The observation was completed before the nap/rest period, covering the entire period given to the "educational program". During nap time the observer filled the Environmental Rating Questionnaire (ERQ) and obtained demographic information from the staff of the setting. Data was collected by four trained observers.

Instruments

Several instruments designed specifically for this study were utilized:

(1) A Daily Log (DL) in which the observer recorded continuously the activities of the group, and the duration of each group activity, throughout the observation day.

(2) An Environment Rating Questionnaire (ERQ), which was adapted from the Day Care Environment Inventory (Prescott, Kritchevsky & Jones, 1972) and the Family Day Care Rating Scale (Harms & Clifford, 1984) to the Israeli setting, was filled out by the same observer at the end of the observation day.

(3) A Time-sampling Observation of Target Children and Caregiver (OBS), a procedure which utilized predefined recording sheets and followed a prescribed routine and recording rules. A half-hour time-sampled observation was made during the visit of each target child and the caregiver, recorded in six periods of five minutes each, in a fixed sequence of Target-child-A followed by Target-child-B followed by Caregiver. This sequence repeated itself six times. Behaviour was observed for 10 seconds and then recorded for 10 seconds, yielding altogether 90 time sampling units of behaviour for each target subject. At the end of each five minute period the observer filled out a short questionnaire on that period (e.g. background events and interruptions, mood, child-initiated group activity, caregiver's location). Following a break the observer shifted to the next target subject. The time-samples for each subject were thus spread over the entire observation day.

Measures

Measures were used to describe: (1) the population of users and providers; (2) daily experiences generated by the educational environment, i.e. the daily program, the physical environment, and the caregivers' behavior; and (3) the experiences generated by the toddlers' own behavior.

The population of users and providers was described via children's background (age, sex, age of entry, birth order, and mother's age and years of education). These were derived, when possible, from files or from information from the setting staff. Caregivers qualifications (age, years

of experience as caregiver, years of education and previous training) were obtained from the caregivers.

The daily experiences generated by the educational environment were described by the following measures:

Quality of the physical environment - A composite standardized score of the ratings of environmental characteristics (ERQ) (physical care conditions, space available to children, play material and space organization). Chronbach standardized item Alpha for the composite score is .68, corrected item-total correlations are .47, .34, .40, .28 and .46 respectively.

Emotional tone of the program - A rating (ERQ) of the program's general tone as tense (=1), or relaxed (=3).

Educational activities - The proportion of the organized time of the observation day (DL) spent in activities initiated by the caregiver which contribute to development (sensorimotor, concepts, language and general enrichment), e.g. playing with Leggo, puzzles, painting, learning songs, listening to stories, looking at books, etc.

Quality of interaction (positive) - A composite standardized score of the caregiver's measures (positive affect, positive responsiveness, positive use of language, facilitative, interacting individually (OBS and ERQ)). Chronbach standardized item Alpha for the composite score is .82, corrected item-total correlations are .66, .74, .53, .54, .35 and .71, respectively.

Restrictions - The caregiver attempts to control the children's behavior (e.g. diverting attention, warning, scolding and physically removing the child from the situation (OBS)).

The daily experiences generated by the toddlers' own behavior were described by two standardized composite measures derived from the child's observation (OBS):

Positive learning experiences - Child engages in skill or concept acquisition (e.g. hand-eye coordination or behavior which facilitates the acquisition of space, time or group relationship concepts), and is not engaged in aimless activity (e.g. doing nothing, wandering aimlessly) or in confrontation with the caregiver over non-compliance with rules or demands. Chronbach standardized item Alpha for the composite score is .56, corrected item-total correlations are .44, .44, and .29, respectively.

Social behavior - Child is not alone and is observed engaged in verbal communication, positive peer interaction (e.g. smiling, sharing, helping, imitating) or in group activity initiated by the children (e.g. beating spoons on a table, bumping together into a pile of cloths, running around the room). Chronbach standardized item Alpha for the composite score is .72, corrected item-total correlations are .73, .60, .40, and .43, respectively. This measure does not include any agonistic behavior. Children were observed struggling over objects or territory, or hitting other children very infrequently (less than 1% of the observation period). Due to this low frequency these measures were not included in the analysis.

Inter-observer agreement - For all measures ranged from .69 to .90 (Pearson correlation).

Data analysis

The analysis is designed to investigate the similarities and differences between the three settings (one way ANOVA on all measures), and to investigate the effects of variables that were found to differentiate between the three settings (e.g. child' background and aspects of the educational environment) on the behavior of the children. A two-stage step-wise multiple regression analysis was employed to explore these relationships. The last step in each equation examined the contribution of the child care setting, after controlling for the known differences among them.

RESULTS

The characteristics of the participants in the three child care settings

Children and mothers. As expected from our sampling procedure, the groups did not differ in terms of age or sex of children. Ninety percent of FDC, 94.4% of Centers and 85% of the Kibbutz children were within a six month age range (21-27). Nor did the groups differ in terms of mother's education. The mothers in the Kibbutz tended to be somewhat older, resulting in children being of higher birth order. Children on the Kibbutz entered child care earlier than children in the other two settings, as can be expected from the different social policy of the Kibbutz.

Table 1 about here

Caregivers. Caregivers were of the same age in all three settings. They were significantly older than mothers in FDC (T=5.3, DF=29, $p<.001$), but not in the Kibbutz. Caregivers in FDC and Centers had less training than those in the Kibbutz. In general however, caregivers in all settings had relatively little training. Caregivers in FDC were, on average, less educated than those in the Kibbutz and had the least amount of experience. No caregiver in the Centers had more than high school education, while only 5.8% in the FDC and 22.2% in the Kibbutz had more than 13 years of education. No caregiver had more than 16 years of education.

Daily experiences generated by the educational environment

No differences were found in the quality of the physical environment between FDC and Centers. Both FDC and Centers did rate lower, however, than the Kibbutz.

~~Table 2 about here~~

Equal amounts of time were given in the daily program in FDC and Centers to caregiver initiated educational activities, while the children in the Kibbutz had less exposure to such experiences. Though the general emotional tone of the daily program in both FDC and Kibbutz was fairly relaxed, it was significantly more tense in the Centers. The caregivers in the Centers are more restrictive, and provide poorer quality interaction than caregivers in FDC.

A covariate analysis of variance, which controlled for variations in caregivers' qualifications (that differentiated between the three settings) shows that the observed differences in caregivers' behavior and the emotional tone of the program are independent of the differences in caregivers' qualifications. It however also indicated that the differences in the quality of the physical environment and the frequency of caregiver-initiated educational activities have become statistically non-significant (F=2.98 and 1.15, respectively).

Experiences generated by the behavior of toddlers

The tendency of children to engage in positive learning experiences was relatively independent of their tendency to engage in social behavior (r=.16). Although children's ages differed only within a six-months range, both measures were mildly, but significantly, correlated with the child's age (r=.18 and .22, respectively). This finding suggests that these measures reflect some aspect of a child's competence.

Table 3 about here

Table 3 demonstrates that children in both FDC and Centers were less likely to engage in positive learning experiences than Kibbutz children. FDC children were also less likely, when compared to Kibbutz children, to engage in social behavior. FDC children did not behave significantly different from Center children.

Sources of differences in the behavior of toddlers

The three child care settings differ in two main dimensions, which are potential sources of influence on the behavior of the children. The settings differ in some aspects of the children's background (birth order, age of entry and maternal age), as well as measures of the educational environment (quality of physical environment and interaction with the caregiver, and the emotional tone and activities of the daily program).

A series of two-step regression analyses was carried out to examine the relative contribution of potential sources of influences on the behavior of the children. In the first analysis, the child's background variables were entered in the first step and the type-of-setting in the second step. The analysis showed that these background variables, as a block or individually, did not contribute significantly to the variance in the toddlers' behavior and did not eliminate the type-of-setting effect.

The relative contribution of the educational environment variables was analyzed in a similar way. In order to assess whether the variations in the educational environment explain the differences between the settings, the composite scores of the quality of the physical environment, quality of interaction with the caregiver, caregiver restrictions, ratings of the program's emotional tone, and the proportion of time given to caregiver-initiated educational activities were entered in the first block of a two-step regression analysis. The type of setting was entered in the second step.

Table 4 about here

Table 4 reveals that the differences observed among toddlers are explained by the quality of the educational environment rather than by the type of child care.

The Beta values of each of the educational environment variables in the final equation indicate the relative weight of the predictors in influencing the children's behavior, while controlling for the effect of the type of child care. The results demonstrate that it is the specific aspects of the environment that are relevant to learning experiences, while the emotional tone of the program and caregivers' restrictions had no such effect on these experiences. The dominance of the effect of the quality of the physical environment may explain why toddlers in the Kibbutz were seen engaged more frequently in these experiences (Table 4).

The differences in the children's likelihood to engage in social behavior are not fully explained by the educational environment. Although children in a more relaxed and/or better physical environment tend to engage less in social behavior, this explanation does not eliminate the effect of type-of-setting.

In view of the effects of the caregiver's background on social behavior an ad-hoc regression analysis was added, including caregiver qualification variables as a first block of predictors. The second block included environmental variables, with the final block including the type-of-setting. The results indicate that controlling for caregiver's background and environmental effects leads (as reported earlier) to an even stronger type-of-setting effect: Children in FDC engage less in social behavior than children in either Centers or Kibbutz.

DISCUSSION

This study explores the nature of the daily experiences of toddlers in the most common type of day care, namely, FDC. Comparing the findings of this study with those reported in the US and elsewhere, it is found that the general structural features and caregivers' qualifications of the Israeli FDC are similar to those found in North America (Stalling & Porter, 1980; Howes, 1983; Clarke-Stewart & Gruber, 1984; Rosenthal, in press; Goelman, Rosenthal & Pence, in press). In contrast, the typical Israeli Center is more like the poorest Centers described by some US researchers (Everson et al.,1984; Golden et al.,1978; Vandell et al., 1988). The Israeli Centers differ greatly in terms of caregivers' qualification (education and training), group size and adult-to-child ratio, from those described as more typical in the US and elsewhere (Cochran, 1977; Howes, 1983; Clarke-Stewart & Gruber, 1984).

Since the Israeli FDC and Center caregivers did not differ in their qualifications, the differences found in these caregivers' behavior and the emotional tone of the program is most likely attributable to large groups and a poor adult-to-child ratio in the Centers (Roupp & Travers, 1982) and not to caregivers' qualifications. The fact that Israeli Center caregivers used restrictions three times more often than the US Center staff, and that there were no differences in the frequency of restrictions between the Israeli and US FDC caregiver (Howes, 1983), strengthens this argument. Furthermore, the Israeli FDC caregivers, in comparison with sponsored FDC

providers in the NHDC study (Stalling & Porter, 1980) spent more time in teaching and playing with the children. The quality of the physical environment and educational program they provided were rated just as good as that offered by the Centers. These outcomes are attributed to the special investment of the sponsoring agencies of the Israeli FDC system in supervision and on-site, on going, in-service training provided to the FDC caregivers (Rosenthal, in press).

The implications of these results are that the "type" of child care setting as such cannot explain variations in the quality of educational environment being offered and notice must instead be taken of the "structural" or "organizational" characteristics of each type of setting. Thus it seems that sponsored FDC, which provides adequate supervision and in-service training (which is designed to meet the needs of children), can overcome some of the potential handicaps associated with this type of care.

It is interesting to note that in spite of the poorer quality of interaction with the caregiver and of the emotional tone of the program, toddlers in Centers did not behave differently from those in FDC. The regression analyses partially clarify this finding. Positive learning experiences are influenced by three aspects of the educational environment, two of which (with the strongest effect) were <u>not</u> found different in these two settings, i.e. the quality of physical environment and the (planned) educational activities.

The Kibbutz child care environment cannot be easily compared to other types of child care in or outside Israel, mostly because of the self-selective aspect of its population and unique social ideology. However,

since the child-measures employed in this study are expected to be more sensitive to the effects of the care environment than to family or societal factors, such a comparison might be instructive.

Placing children in group care in a Kibbutz is part of a more general social ideology, with children entering group care within the first few weeks of life. The same social and educational ideology dictates a relatively high investment in physical and personnel resources for child care. Thus we found that although group size in the Kibbutz is similar to that of FDC, the ratio of caregivers to children is doubled. Kibbutz caregivers have more years of education, as well as more training and experience than those of FDC. A considerable gap was observed in the rating of the physical environment between the Kibbutz and other two settings. The educational ideology is reflected in the fact that children in a Kibbutz setting spend less time in caregiver-initiated educational activity. Nevertheless, after controlling for caregivers' qualification, these differences are not statistically significant. It is also interesting to note that although the caregivers in the Kibbutz were better educated and had more pre-service training and experience, there were no differences between Kibbutz and FDC caregivers in the quality of their interaction with the children. These findings suggest that the observed differences between Kibbutz and FDC in the quality of the physical environment and the nature of the educational program are a function of the investment in personnel rather than the general educational ideology or direct investment in the physical environment.

There were however some marked differences between the FDC and Kibbutz settings in the behavior of the toddlers: Children in the Kibbutz spent significantly more time than children in FDC in both positive learning experiences and in social behavior. The regression analyses show that the higher rate of engagement in positive learning experiences cannot be explained in terms of the measures of children's or caregiver's background. The fact that there was no difference between Kibbutz and FDC in the quality of interaction with the caregiver, and that FDC had more frequent educational activities, negates these measures as explanatory variables for the observed differences in children's behavior. The most powerful predictor of positive learning experiences is the quality of the physical environment, and indeed, it is in this measure that we find the advantage of the Kibbutz over the other two settings. This finding supports the Kibbutz educational philosophy that offering a rich and stimulating physical environment and ample opportunity to engage in "free play", under the supervision of a caregiver who offers positive interactions, will generate sufficient learning experiences for toddlers.

Differences in toddler behavior in FDC and Centers can be further explained by the age composition of their groups. FDCs usualy have a more heterogenous age mix, possibily changing the character of social interactions leading to a lower rate of frequency of social behavior in FDC. Similar negative effects of age-mix on toddler's behavior was found in the NHDC study (Stalling & Porter, 1980). Further study is needed, however, to clarify the effects of age mix and other dimensions of the child care

environment on the social behavior of toddlers, as distinguished from the more cognitively orientated learning experiences (Wachs & Chan, 1986).

In conclusion, this study suggest that although different types of care may serve different populations, or represent varying ideologies, it is the implications of these differences to "structural" aspects of the program that determines the daily experience of toddlers in a given setting (Rosenthal, in press). This study highlights the fact that differing structural aspects of a child care setting determine <u>different dimensions</u> of quality of care. Also, different dimensions of the quality of care have different effects on various behaviors of toddlers. It is suggested, therefore, that investigations derived from the "environmental specificity hypothesis" (Wachs & Chan, 1986) will benefit the study of the effects of quality of care on toddlers' behavior and development in various types of group care.

Table 1: The characteristics of children, mothers and caregivers in three child-care settings. (Means, S.D. and ANOVA)

	FDC (1)	Center (2)	Kibbutz (3)	DF	F	Scheffe Test
Children						
Age	23.91 (2.57)	24.83 (2.43)	24.55 (2.84)	2,82		
Age of entry	12.74 (5.39)	-----	3.59 (3.74)	1,58	41.07***	
Birth order	1.75 (1.12)	-----	2.83 (1.34)	1,60	10.61**	
Sex: Boys (N)	28	11	10			
Girls(N)	19	7	10			
Mothers						
Age	28.07 (4.37)	-----	32.35 (5.17)	1,58	10.55**	
Education	13.68 (3.14)	12.21 (2.64)	13.56 (2.09)	2,73	1.46	
Caregivers						
Age	34.70 (7.64)	32.67 (8.77)	30.50 (7.65)	2,47	1.01	
Education	10.56 (2.05)	11.00 (1.50)	12.56 (1.59)	2,49	3.94*	(1,3)
Experience	2.71 (1.64)	8.78 (9.59)	7.22 (5.26)	2,49	7.98***	(1,2)(1,3)
Training (mo)	2.16 (1.00)	2.46 (3.33)	6.81 (6.57)	2,41	7.30**	(1,3)(2,3)

----- = This information was not available for the Centers

* = $p<.05$ ** = $p<.01$ *** = $p<.001$

Table 2: Daily experiences generated by the child's environment (Means, S.D and ANOVA)

	FDC (1)	Center (2)	Kibbutz (3)	DF	F	Scheffe
Quality of Physical environment (composite)	-.28 (.56)	.04 (.45)	.84 (.37)	2,48	16.82***	(1,3)(2,3)
Program: Educational activity (proportion)	.28 (.18)	.27 (.09)	.12 (.12)	2,45	3.63*	(1,3)
General Tone (ratings)	2.58 (.47)	1.61 (.74)	2.33 (.43)	2,46	12.14***	(1,2)(2,3)
Caregiver's behavior						
Quality of Interaction (composite)	.10 (.60)	-.58 (.68)	-.04 (.90)	2,50	4.60**	(1,2)
Restrictions	10.07 (6.10)	16.12 (7.70)	8.36 (2.56)	2,50	4.49*	(1,2)(2,3)

* = p<.05 ** = p<.01 *** = p<.001

Table 3: The behavior of children in three child care settings (Means, S.D. and ANOVA)

	FDC (1)	Center (2)	Kibbutz (3)	DF	F	Scheffe
Positive Learning Experiences (Composite)	-.18 (.77)	-.10 (.54)	.52 (.53)	2,82	7.68***	(1,3)(2,3)
Social Behavior Experiences (composite)	-.21 (.74)	.09 (.58)	.41 (.69)	2,82	5.78**	(1,3)

* - p<.05 ** - p<.01 *** - p<.001

Table 4: Hierarchical regression of toddlers' behavior on characteristics of the immediate environment and type of child care setting.

	The behaviors of toddlers in child care	
	Positive Learning	Social Behavior
Educational environment		
Quality of physical environment	.54***	-.29
Emotional Tone of program	-.07	-.32*
Educational activities	.34**	.07
Quality of Interaction	.23*	.07
Restriction	.08	.08
First step Adjusted R square	.39***	.07
Type of care		
CDC vs others	-.06	.16
Kibbutz vs others	.04	.57**
Final Adjusted R square	.39***	.17**

Note: The data presented are Beta coefficients of the final equation, and the R square change for each step of the equation separately.
DF are 5,68 for the first step, and 7,66 for the second step.

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